

Stream Line

City of Indianapolis / Department of Public Works / Indianapolis Clean Stream Team

Summer 2007 | Issue 13



Inside This Issue

- 2 From The Director
- 2 Award Nominations Accepted
- 2 Indianapolis Students "Make a Splash"
- 2 City's Investment Garner Attention
- 3 Natural Alternatives to Chemical Applications
- 4 SCADA System Enhances Sewer Operation and Maintenance

Statement of Purpose

The Indianapolis Clean Stream Team is overseeing many projects to prevent raw sewage overflows into our waterways, eliminate failing septic systems, and improve flood control and drainage. Stream Line is published quarterly to keep you informed about the city's progress in restoring the health of our streams and improving the quality of life in our neighborhoods.

Contact Info

Send letters to:

Indianapolis Clean Stream Team
Attn: Jodi Perras
151 N. Delaware St.
Suite 900
Indianapolis, IN 46204

Tel: 317-327-8720

Fax: 317-327-8699

Email: jperras@indygov.org



**SewerOverflow
Hotline:
327-1643**

SOUTHEAST SIDE WILL BENEFIT FROM SEWERS AND BETTER DRAINAGE

Hundreds of homes on the southeast side will gain access to the city sewer system and longstanding drainage problems will be addressed through a \$28-34 million project set to begin construction in late summer.

The Southeastern Corridor Phase 1 project will bring sewers to 1,200 homes and businesses along Southeastern Avenue between Interstate 74 and Thompson Road. The project also will install storm sewers and curbs with gutters, resolving problems with standing water in yards and streets.

Construction is scheduled to begin in late summer and continue through 2009, according to construction manager Bob Zieles of the Indianapolis Department of Public Works.

In 2002, the Marion County Health Department completed a door-to-door survey of 216 homes in the project area. More than 50 percent had failing septic systems, including bleed outs, repairs, poor stormwater drainage and lack of room for a septic system repair.

Studies have shown that failing septic systems contribute to poor water quality in the city's waterways and create health hazards in neighborhood streams. The project is being funded through the city's Septic Tank Elimination Program (STEP) and stormwater utility.

See "Southeast Side," Page 3



Think Before Using that Insecticide, Herbicide or Fertilizer

With summer in full swing, many people spend hours working toward healthy, weed-free lawns and gardens. In doing so, they may turn to insecticides, herbicides and fertilizers lining the shelves of hardware stores and garden shops. These chemicals may seem safe as a first defense against weeds and pests, but they should be your last resort.

Even small amounts of commonly used lawn and garden chemicals can be dangerous to human health, degrade water quality and disrupt an ecosystem. These chemicals can damage or kill organisms in our waterways, as well as the aquatic life that rely on them. The Indianapolis Clean Stream Team encourages the practice of integrated pest management (IPM) to reduce these negative impacts.

IPM is a highly effective approach to minimize the use of chemicals by maximizing the use of natural processes. IPM practitioners may use natural enemies of a pest (such as lady bugs to control aphids) or gardening methods such as mulching, along with organic fertilizers and less toxic alternatives to common lawn and garden chemicals. For examples of these natural alternatives to chemical applications, see the table on Page 3.



See "Insecticide, Herbicide or Fertilizer," Page 3

Find us on the Web at: www.indycleanstreams.org



BRIEFS

Award Nominations Accepted

Do you know somebody who is deserving of honorary membership to the Clean Stream Team? The city is accepting nominations for businesses, organizations and residents throughout Marion County who work on behalf of our waterways.

Honorary membership may be awarded for the following achievements or activities:

- Environmental leadership over an extended time
 - Voluntary stewardship of our waterways through a one-time or sustained project
 - Partnership with the city on water quality issues or projects
- Visit www.indycleanstreams.org to make a nomination.

An internal committee will review the nominations and make award recommendations to the DPW director.

Indianapolis Students "Make a Splash"

Nearly 350 fourth and fifth grade students made a splash at the Department of Public Works' second annual "Make a Splash" water festival – an increase of more than 100 students over last year's inaugural event.

Thank you to the following sponsors who made this successful event possible: American Structurepoint, ARCADIS, Black & Veatch, Bowen Engineering, CDM,



DLZ Indiana, EarthTech, Friends of the White River, Hirons & Company, Innovative, KCI Technologies, Marsh, O.W. Krohn & Associates, Perras & Associates, Project WET, R.W. Armstrong,

Sycamore Advisors, United Consulting Engineers & Architects, United Water, Veolia Water, and VS Engineering.

City's Investment Garners Attention

The city's historic investment in clean water infrastructure creates many opportunities for businesses with expertise in wastewater-related design, construction, materials and related services. While working to mentor and grow local and minority/women-owned businesses, the Department of Public Works is also promoting these business opportunities to regional and national companies. To date, four Midwest construction trade associations have featured the Indianapolis program in their publications. Several additional trade publications also plan to publish an article, including Government Engineering, Trenchless Technology, U.S. Water News, Midwest Construction and Stormwater.



Mayor Bart Peterson recently challenged departments and residents to work toward a more sustainable Indianapolis that protects the global climate and promotes energy efficiency and

conservation.

The Indy GreenPrint encourages everyone to conserve energy, improve air quality and become better stewards of



our natural resources, including our waterways.

The mayor outlined his vision for Indy GreenPrint in May 2007. It will be

followed by a specific action plan for city government this summer in the areas of energy and emissions, natural resources stewardship, materials and waste management, smart transit, smart development and community education.

The GreenPrint implementation plan will include:

- The city leading by example, implementing policies and measures contained in the action plan
- Monitoring and verifying improvements in energy efficiency and conservation
- Creating a Green Commission to explore new policy areas and make additional recommendations to help us achieve our vision for a greener Indianapolis

The Department of Public Works is at the forefront of the Indy GreenPrint initiative, with programs such as Recycle Indianapolis, Knozone and Clean Streams-Healthy Neighborhoods. These and other efforts will continue and be enhanced under the GreenPrint banner.

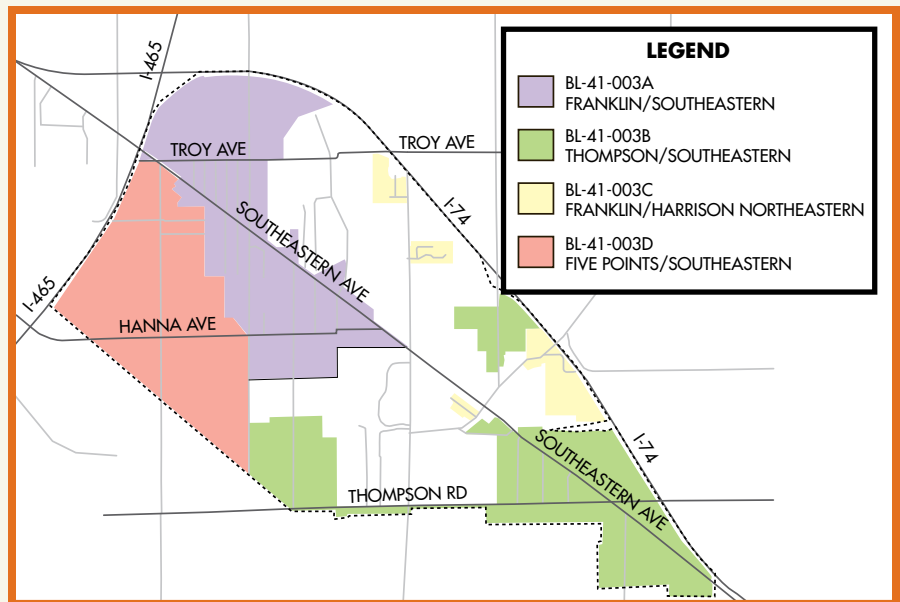
Through small actions, such as using compact fluorescent bulbs, turning off electronic devices when not in use, carpooling to work, recycling or purchasing fuel efficient vehicles, we all can make a difference.

Southeast Side (continued from Page 1)

Residents in the project area have reported standing water in yards and streets for years. Therefore, the STEP project will include drainage improvements along various areas within the project limits.

"The new sanitary sewers and storm sewers will not only alleviate health concerns and drainage problems, but will also create the necessary infrastructure for economic growth," Zieles said.

"The Southeastern STEP project is one major component of our long-term plan for a healthier future. We are asking residents to be patient during the construction phase, which will bring many benefits to the Southeast side."



The Southeastern Corridor Phase 1 project will bring sewers to 1,200 homes and businesses.

Insecticide, Herbicide or Fertilizer (continued from Page 1)

When chemicals are necessary, please follow these guidelines for safe application:

- Use a chemical that **addresses the specific pest**, plant or weed.
- Utilize **non-aerosol** chemical applications.
- Choose the **least toxic** products available.
- Buy **ready-to-use** products, instead of concentrated.
- **Never** put chemicals down any drain.
- **Sweep up** excess amounts and dispose of properly; never wash them into storm drains.
- Use **kitty litter** to clean up spills; then dispose of used absorbent properly.
- Read labels and follow instructions **exactly**.
- **Do not** apply chemicals when rain is imminent or on bare soil.
- **Do not** assume your lawn needs fertilizer. Test your soil for nutrient levels and fertility.
- Use **earth-friendly**, pesticide-free fertilizers low in nitrogen and phosphorus (avoid "weed and seed" varieties).

Dumping unused chemicals down a drain or on the land can be illegal. Dispose of unwanted or unused portions of insecticides, herbicides and fertilizers through the Indianapolis ToxDrop Program by calling 327-4TOX, or visit www.recycleindianapolis.org.

To learn more about pesticide use and integrated pest management, visit these Web sites:

- Indianapolis Clean Stream Team: www.indycleanstreams.org
- Indiana Department of Environmental Management: www.IN.gov/idem/your_environment/pests
- University of Illinois: www.ipm.uiuc.edu/
- Purdue University Marion County Extension Service: www.ces.purdue.edu/Marion/Hort.htm

NATURAL ALTERNATIVES TO CHEMICAL APPLICATIONS

PEST CONTROL

- Hand pick or wash pests off of plants
- Use row covers in gardens
- Install copper flashing around garden beds to deter snails and slugs
- Apply milky spore powder to kill Japanese beetle grubs
- Spray insecticidal soaps and horticultural or vegetable oils on plants to deter aphids, mites, whiteflies, thrips and caterpillars
- Apply diatomaceous earth for aphids, thrips, tomato hornworms and other pests
- Use neem oil or azadirachtin extract to deter cutworms, mites and nematodes
- Introduce predatory insects, such as lady bugs, spiders, soldier bugs, predatory mites and nematodes to rid gardens of aphids, mites and insect eggs
- Plant repellent plants, such as marigolds and mint

WEED CONTROL

- Spread mulch around planting beds
- Water, but not excessively
- Aerate lawn
- Apply corn gluten meal, especially for dandelions and crabgrass
- Pull weeds by hand
- Pour boiling water on weeds in driveways and patios
- Pour vinegar on weeds
- Set lawn mower at 3-inch height or greater

FERTILIZER

- Leave grass clippings on the lawn
- Apply blood and bone meals
- Mix compost with soil
- Choose organic fertilizers

Under Construction:

SCADA SYSTEM ENHANCES SEWER OPERATION AND MAINTENANCE

The Indianapolis Department of Public Works is installing a \$12 million remote-controlled sewer monitoring and operating system that will improve the operation of the city's sewer system and reduce sewage overflows into streams.

The Supervisory Control and Data Acquisition system, known as SCADA, will replace the city's outdated sewer alarm system, which provides only limited information to sewer system operators. The new SCADA system will monitor sewage flow, measure rainfall and detect problems in more than 250 locations, including sewage lift stations and diversion structures that control the flow of sewage to the city's two wastewater treatment plants.

The SCADA system gathers data so system managers can continuously monitor its status, identify current operating needs, maintain equipment, and take action from the central control facility to minimize or prevent trouble. The SCADA system will also save operation and maintenance costs.

A SCADA system consists of three primary elements:

- Remote site equipment that monitors sewage flow, equipment functions and other issues at each location;
- A communications network that allows operators to read signals and take actions from remote locations; and
- A central control facility, located at the Belmont Wastewater Treatment plant.



250 lift stations are placed in easements and rights-of-way across Indianapolis.

The SCADA system will use a wireless communication system linked to the current countywide emergency management system.

During installation, which began in May, nearby residents may see work trucks and maintenance staff at the lift stations. Work will be contained within city easements or rights-of-way.

The lift station sites will require new electrical panels, boxes and antennas to contain and operate the computerized communication system. There should be no major inconveniences, disturbances, or traffic delays resulting from this work, which lasts one to three weeks at each site. The two-phased project will continue through the spring of 2010.

